NPDES Permit No. IL0003514
Notice No. JAR: 15070101

Public Notice Beginning Date: **August 18, 2015**

Public Notice Ending Date: **September 17, 2015**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water,
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger:

St. Mary's Cement, Inc.
1914 West Oak Lane
Dixon, Illinois 61021

Name and Address of Facility:

St. Mary's Cement, Inc.
1914 West Oak Lane
Dixon, Illinois 61021
(Lee County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES permit to discharge into the waters of the state and has prepared a draft permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Jaime Rabins at 217/782-0610.

The applicant is engaged in the operation of a mine processing area and cement processing plant (SIC 1422 and 3241). The facility produces Portland Cement. Plant operation results in an average discharge of 0.328 MGD of compressor cooling water from the Old Clay Storage Building, raw mills and raw mill compressor cooling water, filter backwash water from the river water treatment system, vehicle wash water, condensate from the main stack continuous emissions monitoring system (CEMS), condensate from the CEMS air conditioning system and storm water from outfall 001, 1.241 MGD of coal and petroleum coke pile runoff, plant air compressor cooling water, coal and petroleum coke mill cooling water, precipitator compressor cooling water, preheater fan cooling water, analyzer water, Dracco baghouse fan cooling water, homogenizing silos compressor cooling water, #1,2,3 kiln piers discharge end cooling water, #1,2,3 finish mills cooling water, cement coolers cooling water, #1,2,3 finish mill compressor cooling water, #4 finish mill cooling water, #4 finish mill compressor cooling water, and storm water from outfall 002, 0.048 MGD of packhouse compressors “A” pump and ”B” pump cooling water, packhouse air compressor and storm water from outfall 003, 0.409 MGD of #1,2,3 kiln piers feed end cooling water, amerex cooling water, a/c condensate, and storm water runoff from an inactive limestone mining area from outfall 004, storm water runoff on an intermittent basis from an inactive limestone mining area, rock crushing and stock pile area, and coal waste product storage and disposal area from outfall 005, an intermittent discharge of storm water runoff from an inactive mining area and material stock piles from outfall 006, and 0.014 MGD of sewage treatment plant effluent from outfall 015.

The following modifications are proposed:

The "B" Pump Compressor Cooling Water listed as a contributory wastestream to outfall 002 is actually tributary to 003. It was removed from 002 and added to outfall 003.

Packhouse Compressors Instrument Air Cooling Water tributary to outfall 003 is incorrect and was changed to read Packhouse Air Compressor.

The kiln system #4 is no longer in operation so the following contributing sources were removed from outfall 004: #4 Kiln Piers Discharge End Cooling Water, #4 Kiln Compressors Cooling Water, Wheelabrator Baghouse Fan Motor Bearing Cooing Water, and #4 Kiln Piers Feed End Cooling Water. Amerex Cooling Water and A/C Condensate were added to outfall 004 but are existing sources.

Application is made for existing discharge(s) which are located in Lee County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Outfall	Receiving Stream	Latitude		Longitude		Stream Classification	Biological Stream Characterization
001	Rock River	40º 51' 40"	North	89º 27' 10"	West	General Use	Not Rated
002	Rock River	40º 51' 40"	North	89º 27' 10"	West	General Use	Not Rated
003	Rock River	40º 51' 40"	North	89º 27' 10"	West	General Use	Not Rated
004	Unnamed Ditch Tributary to Rock River	40º 51' 40"	North	89º 27' 10"	West	General Use	Not Rated
005	Unnamed Ditch Tributary to Rock River	40º 51' 40"	North	89º 27' 10"	West	General Use	Not Rated
006	Unnamed Ditch Tributary to Rock River	40º 51' 40"	North	89º 27' 10"	West	General Use	Not Rated
015	Rock River	40º 51' 40"	North	89º 27' 10"	West	General Use	Not Rated

To assist you further in identifying the location of the discharge please see the attached map.

The facility discharges to the Rock River Segment P-21 at a point where 1218 cfs of flow exists upstream of the outfall at critical 7Q10 low-flow conditions from outfalls 001, 002, 003, and 015. The waterbody segment is on the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) List. The receiving water has not been given an integrity rating or been listed as biologically significant in the 2008 Illinois Department of Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*. The impaired designated uses and pollutants causing impairment are tabulated below:

Designated Uses	Pollutants Causing Impairment
Aquatic Life	Ethanol and Fish Kills (non-pollutant)
Fish Consumption	Mercury and Polychlorinated Biphenyls (PCB's)

The facility discharges to unnamed tributaries of the Rock River at a point where zero cfs of flow exists upstream of the outfall at critical 7Q10 low-flow conditions from outfalls 004, 005, and 006. The unnamed tributaries of the Rock River are not on the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) List as they have not been assessed. The receiving water has not been given an integrity rating or been listed as biologically significant in the 2008 Illinois Department of Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*.

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 001 Non Contact Cooling Water and Storm Water (DAF = 0.328 MGD)

This discharge consists of:	Approximate Flow:
1. Compressor Cooling Water from the Old Clay Storage Building	0.1 MGD
2. Raw Mills and Raw Mill Compressor Cooling Water	0.15 MGD
3. Filter Backwash Water from the River Water Treatment System	0.025 MGD
4. Vehicle Wash Water	0.01 MGD
5. Condensate from the Main Stack Continuous Emissions Monitoring System (CEMS)	2 GPD
6. Condensate from the CEMS Air Conditioning System	8 GPD
7. Stormwater	Intermittent

	LOAD LIMITS lbs/day DAF (DMF)				CONCENTRATION LIMITS mg/l			
PARAMETER		30 DAY AVERAGE	DAILY MAXIMUM	REGULATION		30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)								
pH				Shall be in the range of 6.0 – 9.0 standard units				40 CFR 411.12
Total Suspended Solids						15	30	35 IAC 304.124
Effluent Temperature								35 IAC 302.211
Influent Temperature								40 CFR 411.12
Temperature Rise							3°C	40 CFR 411.12

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 002 Non Contact Cooling Water, Coal and Coke Pile Runoff, and Stormwater (DAF = 1.241 MGD)

This discharge consists of:	Approximate Flow:
1. Coal and Petroleum Coke Pile Runoff	0.04 MGD
2. Plant Air Compressor Cooling Water	0.01 MGD
3. Coal and Petroleum Coke Mill Cooling Water	0.08 MGD
4. Precipitator Compressors Cooling Water	0.05 MGD
5. Preheater Fan Cooling Water	0.1 MGD
6. Analyzer Water	10 GPD
7. Dracco Baghouse Fan Cooling Water	0.1 MGD
8. Homogenizing Silos Compressor Cooling Water	0.08 MGD
9. #1,2,3 Kiln Piers Discharge End Cooling Water	0.5 MGD
10. #1,2,3 Finish Mills Cooling Water	0.1 MGD
11. Cement Coolers	0.1 MGD
12. #1,2,3 Finish Mill Compressor Cooling Water	0.1 MGD
13. #4 Finish Mill Cooling Water	0.05 MGD
14. #4 Finish Mill Compressor Cooling Water	0.05 MGD
15. Stormwater	Intermittent

	LOAD LIMITS lbs/day DAF (DMF)				CONCENTRATION LIMITS mg/l			
PARAMETER		30 DAY AVERAGE	DAILY MAXIMUM	REGULATION		30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)								
pH				Shall be in the range of 6.0 – 9.0 standard units				40 CFR 411.12
Total Suspended Solids						15	30	35 IAC 304.124
Iron						2	4	35 IAC 304.124
Mercury								35 IAC 309.146
Effluent Temperature								35 IAC 302.211
Influent Temperature								40 CFR 411.12
Temperature Rise							3°C	40 CFR 411.12

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 003 Non Contact Cooling Water and Stormwater (DAF = 0.048 MGD)

This discharge consists of: Approximate Flow:

1. Packhouse Compressors “A” Pump and “B” Pump Cooling Water 0.024 MGD
2. Packhouse Air Compressor 10 GPD
3. Stormwater Intermittent

	LOAD LIMITS lbs/day DAF (DMF)				CONCENTRATION LIMITS mg/l			
PARAMETER		30 DAY AVERAGE	DAILY MAXIMUM	REGULATION		30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)								
pH				Shall be in the range of 6.0 – 9.0 standard units				40 CFR 411.12
Total Suspended Solids						15	30	35 IAC 304.124
Effluent Temperature								35 IAC 302.211
Influent Temperature								40 CFR 411.12
Temperature Rise							3°C	40 CFR 411.12

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 004 Non Contact Cooling Water and Storm Water Runoff from an Inactive Limestone Mining Area (DAF = 0.409 MGD)

This discharge consists of: Approximate Flow:

1. #1,2,3 Kiln Piers Feed End Cooling Water 0.5 MGD
2. Amerex Cooling Water 0.05 MGD
3. A/C Condensate 8 GPD
4. Stormwater from Inactive Limestone Mining Area Intermittent

	LOAD LIMITS lbs/day DAF (DMF)				CONCENTRATION LIMITS mg/l			
PARAMETER		30 DAY AVERAGE	DAILY MAXIMUM	REGULATION		30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)								
pH				Shall be in the range of 6.5 – 9.0 standard units				35 IAC 302.204
Total Suspended Solids						15	30	35 IAC 304.124
Sulfate							1864	35 IAC 302.208
Effluent Temperature								35 IAC 302.211
Influent Temperature								40 CFR 411.12
Temperature Rise							3°C	40 CFR 411.12

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 005 Storm Water Runoff from an Inactive Limestone Mining Area, Rock Crushing and Stock Pile Area, and Coal Waste Product Storage and Disposal Area (Intermittent Discharge)

	LOAD LIMITS lbs/day DAF (DMF)				CONCENTRATION LIMITS mg/l			
PARAMETER		30 DAY AVERAGE	DAILY MAXIMUM	REGULATION		30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)								
pH				Shall be in the range of 6.5 – 9.0 standard units				35 IAC 302.204
Total Suspended Solids						15	30	35 IAC 304.124
Iron								35 IAC 309.146
Offensive Conditions								35 IAC 406.107

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 006 Storm Water Runoff from an Inactive Mining Area and Material Stock Piles (Intermittent Discharge)

	LOAD LIMITS lbs/day DAF (DMF)				CONCENTRATION LIMITS mg/l			
PARAMETER		30 DAY AVERAGE	DAILY MAXIMUM	REGULATION		30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)								
pH				Shall be in the range of 6.5 – 9.0 standard units				35 IAC 302.204
Total Suspended Solids						35	50	40 CFR 411.32
Offensive Conditions								35 IAC 406.107

The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfall: 015 Sewage Treatment Plant Effluent (DAF = 0.014 MGD)

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)						
pH			Shall be in the range of 6.0 – 9.0 standard units			35 IAC 304.125
Total Suspended Solids	3.5	7.0		30	60	35 IAC 304.120(a)
$CBOD_5$	2.9	5.8		25	50	35 IAC 304.120(g)
Fecal Coliform						35 IAC 302.104
Total Residual Chlorine					0.05	35 IAC 302.208
				WEEKLY AVERAGE NOT LESS THAN	MONTHLY AVERAGE NOT LESS THAN	DAILY MIN.	
Dissolved Oxygen							
Mar - Jul				6.0		5.0	35 IAC 302.206
Aug - Feb				4.0	5.5	3.5	35 IAC 302.206

Load Limit Calculations:

A. Load limit calculations for the following pollutant parameters discharged from outfall 015 were based on an average flow of 0.014 MGD and using the formula of average flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): $CBOD_5$ and Total Suspended Solids.

B. Production based load limits were calculated by multiplying the average production by the effluent limit contained in 40 CFR 411. Production figures utilized in these calculations for the following subcategories are as follows:

Subcategory	Production Rate
Non Leaching	2,184 lbs of Product per Day

Total Suspended Solids (TSS) were limited using Federal production based load limits.

The following sample calculation shows the methodology utilized to determine production based load limitations:

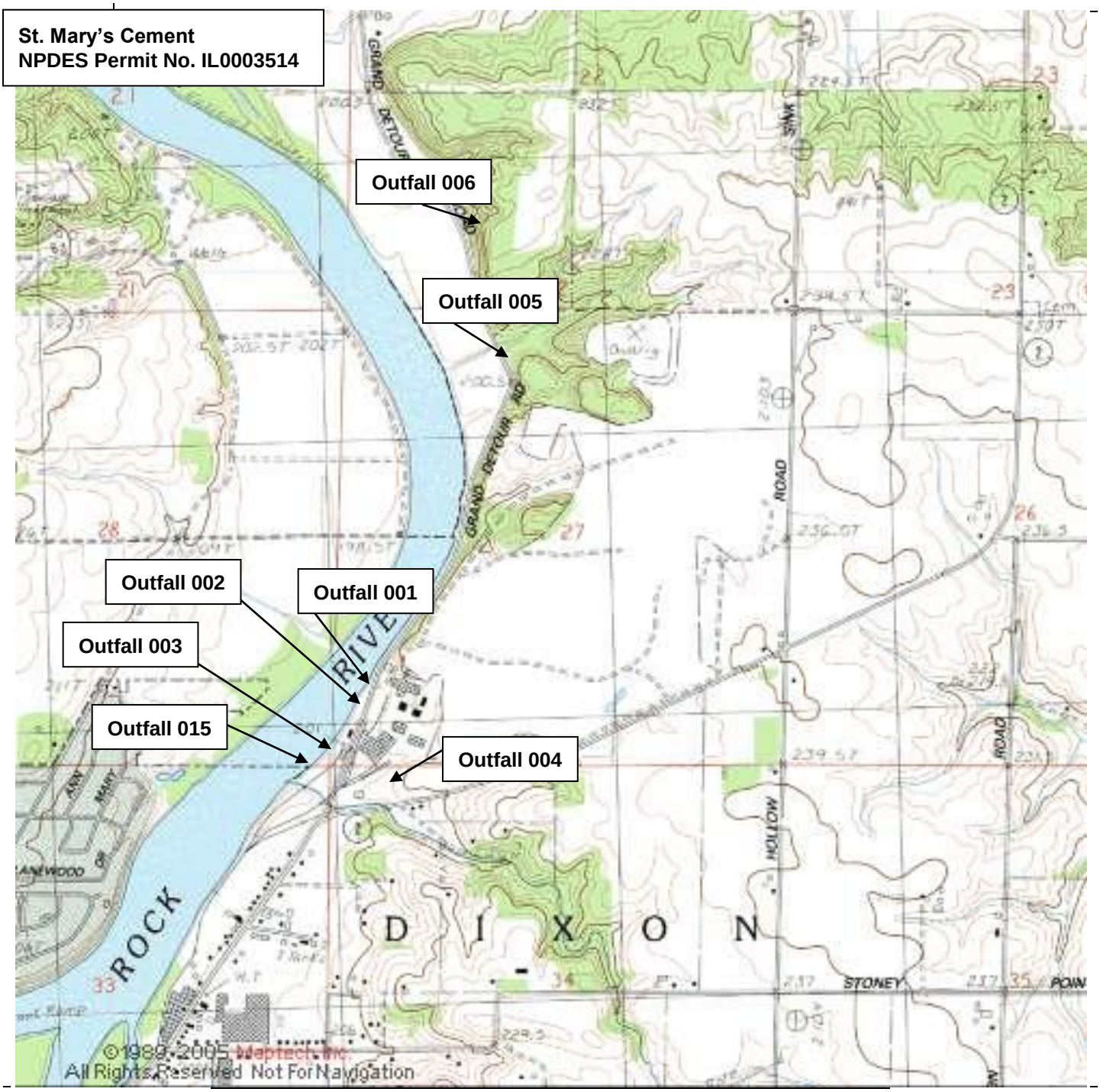
$$\text{TSS max.} = 0.005 \frac{\text{lbs}}{1000 \text{ lbs of product}} \times \frac{2000 \text{ lbs}}{\text{ton}} \times 2184 \text{ tons} = 21.84 \approx 22 \frac{\text{lbs}}{\text{day}}$$

Since the facility discharges industrial wastewater from outfalls 001, 002, 003, and 004 this mass limit will apply to the sum of the mass from each outfall.

The load limits appearing in the permit will be more stringent of the State and Federal Guidelines.

The following explain the conditions of the proposed permit:

The special conditions clarify pH limits, monitoring location, discharge monitoring reports, usage of water treatment additives, treatment plant operator requirements, re-opening of the permit, stormwater discharges, abandonment plans, and mining setback requirments.


St. Mary's Cement
NPDES Permit No. IL0003514
Outfall 006
Outfall 005
Outfall 002
Outfall 001
Outfall 003
Outfall 015
Outfall 004
ROCK RIVER
D I X O N
GRAND DETOUR RD
ROAD
HOLLOW
STONEY
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NPDES Permit No. IL0003514

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:
Effective Date:

Name and Address of Permittee:

St. Mary's Cement, Inc.
1914 West Oak Lane
Dixon, Illinois 61021

Facility Name and Address:

St. Mary's Cement, Inc.
1914 West Oak Lane
Dixon, Illinois 61021
(Lee County)

Discharge Number and Name:		Receiving Waters:
001	Non Contact Cooling Water and Storm Water	Rock River
002	Non Contact Cooling Water, Coal and Coke Pile Runoff, and Stormwater	Rock River
003	Non Contact Cooling Water and Storm Water	Rock River
004	Non Contact Cooling Water and Storm Water Runoff from an Inactive Limestone Mining Area	Unnamed Tributary to the Rock River
005	Storm Water Runoff from an Inactive Limestone Mining Area, Rock Crushing and Stock Pile Area, and Coal Waste Product Storage and Disposal Area	Unnamed Tributary to the Rock River
006	An Intermittent Discharge Of Storm Water Runoff From an Inactive Mining Area and and Material Stock Piles	Unnamed Tributary to the Rock River
015	Sewage Treatment Plant Effluent	Rock River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

SAK:JAR:15070101

NPDES Permit No. IL0003514

Effluent Limitations and Monitoring

From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall: 001 Non Contact Cooling Water and Storm Water (DAF = 0.328 MGD)

This discharge consists of:	Approximate Flow:
1. Compressor Cooling Water from the Old Clay Storage Building	0.1 MGD
2. Raw Mills and Raw Mill Compressor Cooling Water	0.15 MGD
3. Filter Backwash Water from the River Water Treatment System	0.025 MGD
4. Vehicle Wash Water	0.01 MGD
5. Condensate from the Main Stack Continuous Emissions Monitoring System (CEMS)	2 GPD
6. Condensate from the CEMS Air Conditioning System	8 GPD
7. Stormwater	Intermittent

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l				
PARAMETER		30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Flow(MGD)	See Special Condition 1						*	
pH	See Special Condition 2						1/Month	Grab
Total Suspended Solids	See Special Condition 15				15	30	1/Month	Grab
Effluent Temperature	See Special Condition 10						1/Month	Single Reading
Influent Temperature							1/Month	Single Reading
Temperature Rise**						3°C	1/Month	Calculation

*Effluent sampling for flow shall be continuous if hardware allows otherwise it shall be a single reading when monitoring each parameter.

**Temperature Rise shall be the subtraction of Influent Temperature from the Effluent Temperature.

The temperature of the supply water discharged from this outfall on the day of sampling shall be reported as the Influent temperature on the DMR. The temperature shall be measured as close as practical to the source water body but prior to entering any equipment for cooling purposes.

Total Suspended Solids discharges from this outfall shall be reported as a mass in lbs/day and concentration in mg/L on the monthly Discharge Monitoring Report.

NPDES Permit No. IL0003514

Effluent Limitations and Monitoring

From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall: 002 Non Contact Cooling Water, Coal and Coke Pile Runoff, and Stormwater (DAF = 1.241 MGD)

This discharge consists of: Approximate Flow:

1. Coal and Petroleum Coke Pile Runoff 0.04 MGD
2. Plant Air Compressor Cooling Water 0.01 MGD
3. Coal and Petroleum Coke Mill Cooling Water 0.08 MGD
4. Precipitator Compressors Cooling Water 0.05 MGD
5. Preheater Fan Cooling Water 0.1 MGD
6. Analyzer Water 10 GPD
7. Dracco Baghouse Fan Cooling Water 0.1 MGD
8. Homogenizing Silos Compressor Cooling Water 0.08 MGD
9. #1,2,3 Kiln Piers Discharge End Cooling Water 0.5 MGD
10. #1,2,3 Finish Mills Cooling Water 0.1 MGD
11. Cement Coolers 0.1 MGD
12. #1,2,3 Finish Mill Compressor Cooling Water 0.1 MGD
13. #4 Finish Mill Cooling Water 0.05 MGD
14. #4 Finish Mill Compressor Cooling Water 0.05 MGD
15. Stormwater Intermittent

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l				
PARAMETER		30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Flow(MGD)	See Special Condition 1						*	
pH	See Special Condition 2						1/Month	Grab
Total Suspended Solids	See Special Condition 15				15	30	1/Month	Grab
Iron					2	4	1/Month	Grab
Mercury							1/Quarter	Grab
Effluent Temperature	See Special Condition 10						1/Month	Single Reading
Influent Temperature							1/Month	Single Reading
Temperature Rise**						3°C	1/Month	Calculation

*Effluent sampling for flow shall be continuous if hardware allows otherwise it shall be a single reading when monitoring each parameter.

**Temperature Rise shall be the subtraction of Influent Temperature from the Effluent Temperature.

Mercury shall be monitored in accordance with USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E with a reporting limit of 1 ng/L (part per trillion). Results shall be submitted with the March, June, September, and December DMRs.

The temperature of the supply water discharged from this outfall on the day of sampling shall be reported as the Influent temperature on the DMR. The temperature shall be measured as close as practical to the source water body but prior to entering any equipment for cooling purposes.

Total Suspended Solids discharges from this outfall shall be reported as a mass in lbs/day and concentration in mg/L on the monthly Discharge Monitoring Report.

NPDES Permit No. IL0003514

Effluent Limitations and Monitoring

From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall: 003 Non Contact Cooling Water and Storm Water (DAF = 0.048 MGD)

This discharge consists of: Approximate Flow:

1. Packhouse Compressors “A” Pump and “B” Pump Cooling Water 0.024 MGD
2. Packhouse Air Compressor 10 GPD
3. Stormwater Intermittent

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l				
PARAMETER		30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Flow(MGD)	See Special Condition 1						*	
pH	See Special Condition 2						1/Month	Grab
Total Suspended Solids	See Special Condition 15				15	30	1/Month	Grab
Effluent Temperature	See Special Condition 10						1/Month	Single Reading
Influent Temperature							1/Month	Single Reading
Temperature Rise**						3°C	1/Month	Calculation

*Effluent sampling for flow shall be continuous if hardware allows otherwise it shall be a single reading when monitoring each parameter.

**Temperature Rise shall be the subtraction of Influent Temperature from the Effluent Temperature.

The temperature of the supply water discharged from this outfall on the day of sampling shall be reported as the Influent temperature on the DMR. The temperature shall be measured as close as practical to the source water body but prior to entering any equipment for cooling purposes.

Total Suspended Solids discharges from this outfall shall be reported as a mass in lbs/day and concentration in mg/L on the monthly Discharge Monitoring Report.

NPDES Permit No. IL0003514

Effluent Limitations and Monitoring

From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall: 004 Non Contact Cooling Water and Storm Water Runoff from an Inactive Limestone Mining Area (DAF = 0.409 MGD)

This discharge consists of:	Approximate Flow:
1. #1,2,3 Kiln Piers Feed End Cooling Water	0.5 MGD
2. Amerex Cooling Water	0.05 MGD
3. A/C Condensate	8 GPD
4. Stormwater from Inactive Limestone Mining Area	Intermittent

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l				
PARAMETER		30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Flow(MGD)	See Special Condition 1						*	
pH	See Special Condition 3						1/Month	Grab
Total Suspended Solids	See Special Condition 15				15	30	1/Month	Grab
Sulfate						1864	1/Month	Grab
Effluent Temperature	See Special Condition 10						1/Month	Single Reading
Influent Temperature							1/Month	Single Reading
Temperature Rise**						3°C	1/Month	Calculation

*Effluent sampling for flow shall be continuous if hardware allows otherwise it shall be a single reading when monitoring each parameter.

**Temperature Rise shall be the subtraction of Influent Temperature from the Effluent Temperature.

The temperature of the supply water discharged from this outfall on the day of sampling shall be reported as the Influent temperature on the DMR. The temperature shall be measured as close as practical to the source water body but prior to entering any equipment for cooling purposes.

Total Suspended Solids discharges from this outfall shall be reported as a mass in lbs/day and concentration in mg/L on the monthly Discharge Monitoring Report.

NPDES Permit No. IL0003514

Effluent Limitations and Monitoring

From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall: 005 Storm Water Runoff from an Inactive Limestone Mining Area, Rock Crushing and Stock Pile Area, and Coal Waste Product Storage and Disposal Area (Intermittent Discharge)

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l				
PARAMETER		30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Flow(MGD)	See Special Condition 1						*	
pH	See Special Condition 2						1/Month	Grab
Total Suspended Solids					15	30	**	***
Iron							1/Month	Grab
Offensive Conditions			No effluent shall contain settleable solids, floating debris, visible oil, grease, scum or sludge solids, color, or odor. Turbidity shall be below obviously visible levels.				1/Month	Visual Inspection

*Effluent sampling for flow shall be continuous if hardware allows otherwise it shall be a single reading when monitoring each parameter.

**The Total Suspended Solids (TSS) samples shall be taken three times a month as separate grab samples or one time a month as a composite sample.

***Composite TSS samples shall consist of at least 3 sample aliquots of approximately equal volume of at least 100 milliliters each, collected at periodic intervals within a 24-hour period. If the permittee elects to take and analyze grab samples, in lieu of a composite sample then: 1) if the discharge is expected to occur on only a single day, three grab samples may be taken within a single 24-hour period or, 2) if the discharge is expected to occur on more than one day three separate grab samples shall be taken over more than one day to represent the monthly discharge. The one composite sample or three grab samples shall be representative of the discharge over the calendar month. The analysis results of each composite and grab sample for TSS shall be reported on the Discharge Monitoring Reports. The monthly average for TSS shall be reported on the Discharge Monitoring Reports.

NPDES Permit No. IL0003514

Effluent Limitations and Monitoring

From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall: 006 Storm Water Runoff from an Inactive Mining Area and Material Stock Piles (Intermittent Discharge)

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l				
PARAMETER		30 DAY AVERAGE	DAILY MAXIMUM		30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Flow(MGD)	See Special Condition 1						*	
pH	See Special Condition 2						1/Month	Grab
Total Suspended Solids					35	50	**	***
Offensive Conditions			No effluent shall contain settleable solids, floating debris, visible oil, grease, scum or sludge solids, color, or odor. Turbidity shall be below obviously visible levels.				1/Month	Visual Inspection

*Effluent sampling for flow shall be continuous if hardware allows otherwise it shall be a single reading when monitoring each parameter.

**The Total Suspended Solids (TSS) samples shall be taken three times a month as separate grab samples or one time a month as a composite sample.

***Composite TSS samples shall consist of at least 3 sample aliquots of approximately equal volume of at least 100 milliliters each, collected at periodic intervals within a 24-hour period. If the permittee elects to take and analyze grab samples, in lieu of a composite sample then: 1) if the discharge is expected to occur on only a single day, three grab samples may be taken within a single 24-hour period or, 2) if the discharge is expected to occur on more than one day three separate grab samples shall be taken over more than one day to represent the monthly discharge. The one composite sample or three grab samples shall be representative of the discharge over the calendar month. The analysis results of each composite and grab sample for TSS shall be reported on the Discharge Monitoring Reports. The monthly average for TSS shall be reported on the Discharge Monitoring Reports.

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Effluent Limitations and Monitoring

From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall: 015 Sewage Treatment Plant Effluent (DAF = 0.014 MGD)

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/l				
PARAMETER	WEEKLY AVG	30 DAY AVG	DAILY MAX	WEEKLY AVG	30 DAY AVG	DAILY MAX	SAMPLE FREQUENCY	SAMPLE TYPE
Flow(MGD)	See Special Condition 1						1/Month	
pH	See Special Condition 2						1/Month	Grab
Total Suspended Solids		3.5	7.0		30	60	1/Month	Grab
$CBOD_5$		2.9	5.8		25	50	1/Month	Grab
Fecal Coliform	See Special Condition 8						1/Month	Grab
Total Residual Chlorine	See Special Condition 16					0.05	1/Month	Grab
				WEEKLY AVERAGE NOT LESS THAN	MONTHLY AVERAGE NOT LESS THAN	DAILY MIN.		
Dissolved Oxygen								
Mar - Jul				6.0		5.0	1/Week	Grab
Aug - Feb				4.0	5.5	3.5	1/Week	Grab

Dissolved Oxygen shall be reported on the DMR as minimum.

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Construction Authorization

Authorization is hereby granted to the above designee to construct the mine and mine refuse area described as follows:

The facility is an existing, approximately 802 acre inactive limestone quarry, aggregate processing area and cement processing plant, designated as St. Mary's Cement, located in Sections 22, 27, 33 and 34, T22N, R9E of the 4th P.M. in Lee County, Illinois in Dixon. Facility operations include the crushing, sizing, grading, and stockpiling of limestone aggregate which is processed through a rotary kiln for the production of Portland Cement. Plant operation results in an average discharge of 0.328 MGD of compressor cooling water from the Old Clay Storage Building, raw mills and raw mill compressor cooling water, filter backwash water from the river water treatment system, vehicle wash water, condensate from the main stack continuous emissions monitoring system (CEMS), condensate from the CEMS air conditioning system and storm water from outfall 001, 1.241 MGD of coal and petroleum coke pile runoff, plant air compressor cooling water, coal and petroleum coke mill cooling water, precipitator compressor cooling water, preheater fan cooling water, analyzer water, Dracco baghouse fan cooling water, homogenizing silos compressor cooling water, #1,2,3 kiln piers discharge end cooling water, #1,2,3 finish mills cooling water, cement coolers cooling water, #1,2,3 finish mill compressor cooling water, #4 finish mill cooling water, #4 finish mill compressor cooling water, and storm water from outfall 002, 0.048 MGD of packhouse compressors "A" pump and "B" pump cooling water, packhouse air compressor and storm water from outfall 003, 0.409 MGD of #1,2,3 kiln piers feed end cooling water, amerex cooling water, a/c condensate, and storm water runoff from an inactive limestone mining area from outfall 004, storm water runoff on an intermittent basis from an inactive limestone mining area, rock crushing and stock pile area, and coal waste product storage and disposal area from outfall 005, an intermittent discharge of storm water runoff from an inactive mining area and material stock piles from outfall 006, and 0.014 MGD of sewage treatment plant effluent from outfall 015. Outfalls 001, 002, 003, 005, 006, 014 and 015 and the flows tributary to these outfalls discharge to the Rock River. Outfall 004 discharges to an unnamed tributary of the Rock River. The facility operates a sedimentation basin located near the cement plant and receives filter backwash from the river water treatment system tributary to outfall 001, a 26' X 6' sediment vault to treat runoff from paved, building roof, and gravel roads tributary to outfall 001, sedimentation pond 02 sized at 1.14 acre feet with a rock check dam outlet tributary outfall 002, proposed floc log station #3 to treat runoff from most of the plant buildings, a vegetated area to the east and much of the former rail yard south of the plant tributary to outfall 004, sedimentation pond 41 sized at 0.44 acre feet which receives runoff from a daily stockpile area tributary to outfall 004, sedimentation pond 42 sized at 1.04 acre feet with a rock check dam outlet receives runoff from an open sided cement byproduct storage building tributary to outfall 004, proposed floc log station #2 at the inlet of sedimentation pond 42, proposed rock check dam 43 will receive runoff from offsite areas tributary to outfall 004, proposed floc log dosing station #1 located on the west side of the crushing plant upstream of proposed sedimentation pond 050, proposed sedimentation pond 050 sized at 5.67 acre feet to receive runoff from rock crushing and processing plant, haul roads, and material storage area tributary to outfall 005, sedimentation pond 051 with proposed rock check outlet sized at 1.0 acre feet which receives runoff from the coal waste product storage and holding area tributary to outfall 005, proposed sedimentation basin 055 sized at 0.5 acre feet to receive drainage from mined areas consisting of mostly fractured bedrock tributary to outfall 005. A sedimentation basin which receives runoff from the inactive mine area and is tributary to outfall 006. A sewage treatment plant has process units for screening, comminution, raw sewage pumping, activated sludge aeration, secondary settling, and disinfection. Chlorine or liquid sodium hypochlorite injection is authorized for disinfection purposes for the discharges from outfall 015.

The abandonment plan received by the Agency on May 20, 2010 shall be executed and completed in accordance with Section 405.109 of Subtitle D: Mine Related Water Pollution.

This Authorization is issued subject to the following Special Condition(s). If such Special Conditions require additional or revised facilities, satisfactory engineering plan documents must be submitted to this Agency for review and approval.

If any statement or representation in the application is found to be incorrect, this permit may be revoked and the permittee thereupon waives all rights thereunder.

The issuance of this permit (a) shall not be considered as in any manner affecting the title of the premises upon which the mine or mine refuse area is to be located; (b) does not release the permittee from any liability for damage to person or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (c) does not take into consideration the structural stability of any units or parts of the project; and (d) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or with applicable local laws, regulations or ordinances.

This permit may not be assigned or transferred. Any subsequent operator shall obtain a new permit from the Illinois Environmental Protection Agency.

There shall be no deviations from the approved plans and specifications unless revised plans, specifications and application shall first have been submitted to the Illinois Environmental Protection Agency and a supplemental permit issued.

The permit holder shall notify the Illinois Environmental Protection Agency (217/782-3637) immediately of an emergency at the mine or mine refuse area which causes or threatens to cause a sudden discharge of contaminants into the waters of Illinois and shall immediately undertake necessary corrective measures as required by Rule 405.111 under Chapter 1, Subtitle D: Mine Related Water Pollution of Illinois Pollution Control Board Rules and Regulations.

Final plans, specifications, application and supporting documents as submitted and approved shall constitute part of this permit and are identified in the records of the Illinois Environmental Protection Agency, by the permit number designated in the heading of this Section.

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Special Conditions

SPECIAL CONDITION 1. Flow shall be measured in units of Million Gallons per Day (MGD) and reported as a monthly average and a daily maximum value on the monthly Discharge Monitoring Report.

SPECIAL CONDITION 2. The pH shall be in the range 6.0 to 9.0 for outfalls 001, 002, 003, and 015. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. The pH shall be in the range 6.5 to 9.0 for outfalls 004, 005, and 006. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 4. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 5. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (NetDMR) instead of mailing paper DMRs to the IEPA. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, http://www.epa.state.il.us/water/net-dmr/index.html.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 15th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using NetDMR shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section, Mail Code # 19

SPECIAL CONDITION 6. In the event that the permittee shall require the use of water treatment additives, the permittee must request a change in this permit in accordance with the Standard Conditions -- Attachment H.

SPECIAL CONDITION 7. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

SPECIAL CONDITION 8. The daily maximum fecal coliform count shall not exceed 200 per 100 ml.

SPECIAL CONDITION 9. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 10. This facility is not allowed any mixing with the receiving stream in order to meet applicable water quality thermal limitations. Therefore, discharge of wastewater from this facility must meet the following thermal limitations prior to discharge into the receiving stream.

A. The discharge must not exceed the maximum limits in the following table during more than one percent of the hours in the 12 month period ending with any month. Moreover, at no time shall the water temperature of the discharge exceed the maximum limits in the following table by more than 1.7° C (3° F).

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
°F	60	60	60	90	90	90	90	90	90	90	90	60
°C	16	16	16	32	32	32	32	32	32	32	32	16

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Special Conditions

B. In addition, the discharge shall not cause abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions.

C. The discharge shall not cause the maximum temperature rise above natural temperatures to exceed 2.8° C (5° F).

C. The monthly maximum value shall be reported on the DMR form.

SPECIAL CONDITION 11. A zone of initial dilution (ZID) is recognized for ammonia with dimensions of 1.0 foot across the width of the river from the end-of-pipe of outfall 015 and 1.0 foot downstream from this point. Within the ZID, 10.3:1 dilution is afforded. A mixing zone is recognized with dimensions extending 1.0 foot across the width of the river and 1 foot downstream. Within the mixing zone 14.2:1 dilution is afforded.

SPECIAL CONDITION 12. The Agency has determined that the effluent limitations in this permit constitute BAT/BCT for storm water which is treated in the existing treatment facilities for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity, and determine whether any facility modifications have occurred which result in previously-treated storm water discharges no longer receiving treatment. If any such discharges are identified the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and be made available to the Agency on request.

SPECIAL CONDITION 13. The permittee shall notify the Agency in writing by certified mail within thirty days of abandonment, cessation, or suspension of active mining for thirty days or more unless caused by a labor dispute. During cessation or suspension of active mining, whether caused by a labor dispute or not, the permittee shall provide whatever interim impoundment, drainage diversion, and wastewater treatment is necessary to avoid violations of the Act or Subtitle D, Chapter 1.

SPECIAL CONDITION 14. Mining excavation operations shall maintain a minimum setback of 200 feet from the potable wells identified as wells 15, 16, 27 and 35 in the permit application, pursuant to section 14.2 of the Illinois Environmental Protection Act.

SPECIAL CONDITION 15. The sum of total suspended solids mass discharged from outfalls 001, 002, 003, 004 shall not exceed 22 lbs per day.

SPECIAL CONDITION 16. All samples for total residual chlorine (TRC) shall be analyzed by an applicable method contained in 40 CFR 136, equivalent in accuracy to low-level amperometric titration. Any analytical variability of the method used shall be considered when determining the accuracy and precision of the results obtained.